



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/612,810	07/10/2000	Anthony S. Bradley	BIT-12	8996
22827	7590	02/15/2006	EXAMINER	
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			ADDIE, RAYMOND W	
			ART UNIT	PAPER NUMBER
			3671	
DATE MAILED: 02/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

MAILED

FEB 15 2006

GROUP 3600

Application Number: 09/612,810
Filing Date: July 10, 2000
Appellant(s): BRADLEY, ANTHONY S.

James Bagarazzi
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/29/04.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

This appeal involves claims 1-6, 8, 11, 13-35, 37-43, 45-72, 76, 77.

Claims 7, 9, 10, 12, 36, 44, 73-75 have been canceled.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

The amendment after final rejection filed on 09/30/2002 has been entered.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

NEW GROUND (S) OF REJECTION

A New Grounds of Rejection are put forth below in item # (9)

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,125,767	Dooleage	06-1992
3,957,098	Hepworth	05-1976
5,902,070	Bradley	3,957,098
5,158,395	Holmberg	10-1992
GB 1,487,986	Labora	10-1977

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4, 5,16-18, 22-25, 31-34, 37, 42, 45-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage # 5,125,767 in view of Hepworth et al. # 3,957,098.

Dooleage discloses a system for forming a barrier or dam, the system comprising:

A 1st tubular container (13) having an inside space, and closed ends, said container being intended for receiving;

At least 2 ballast tubes (11, 12, 19) disposed within the container (13). Wherein the barrier is effective for temporary flood protection and damming operations.

Although Dooleage discloses filling the ballast tubes with water; Dooleage does not disclose is using the system for shoreline protection from tidal action. See Cols. 2-3. However, Hepworth et al. teaches erosion control bags (10) can be used in a variety of applications, such as erosion control of shorelines experiencing tidal action, as well as, erosion control of stream banks, flood control, artificial reefs and may be filled, insitu, over or under water. See Col. 1, Ins. 6-12. Further, Hepworth et al. teaches it is known to fill erosion control bags with water and/or solid fill, such as sand, gravel, cement etc. See Col. 1, Ins. 20-25. Hepworth et al. further teaches the erosion control bags can be

formed via heat sealing or stitching. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the barrier bags of Dooleage, with solid fill materials, as taught by Hepworth et al., in order to expand the utility of the system, by configuring the system to dissipate wave energy.

In regards to Claims 16-18 Dooleage discloses the use of substantially impermeable materials to form the bags (11-13), such that each ballast tube is configured to have no substantial communication or flow between independent ballast tubes, thereby maintaining an independent fill level and pressure, by employing a reinforced neoprene or rubber. See Col. 2. Although Dooleage does not disclose using the system for shoreline protection from tidal action; Hepworth et al. teaches erosion control bags (10) can be used in a variety of applications, such as erosion control of shorelines experiencing tidal action, as well as, erosion control of stream banks, flood control, artificial reefs and may be filled, insitu, over or under water. See Col. 1, Ins. 6-12. Further, Hepworth et al. teaches it is known to fill erosion control bags with water and/or solid fill, such as sand, gravel, cement etc. See Col. 1, Ins. 20-25. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the barrier bags of Dooleage, with solid fill materials, as taught by Hepworth et al., in order to expand the utility of the system, by configuring the system to dissipate wave energy.

In regards to claims 22-24 Dooleage discloses a method of forming a barrier or dam, for soil protection and flood control, comprising the steps of:

Providing an elongated container (13).

Providing a plurality of independent outer-ballast tubes (11, 12), within the interior of said elongated container (13). The ballast tubes being enclosed such that there is no substantial communication or fluid flow between independent outer-ballast tubes (11, 12).

What Dooleage does not disclose is using the barrier as an artificial reef. However, Hepworth et al. teaches it is well known to use erosion control bags (10) in pyramid-shaped assemblies (40) for use underwater, as an artificial reef. Said method comprising the steps of:

Pumping a water or water/solids slurry into each of a plurality of erosion control bags (10) to inflate each of said bags (10) and displace any air, within said erosion control bags, that would cause said bags to be buoyant.

Pumping a slurry into each of said erosion control bags (10) to dissipate most, if not all of said water, already inside of said bags (10), thereby leaving said bags filled with a lower layer of solid fill material and if desirable an upper layer of water. Said steps of pumping water and slurry being performed by utilizing "material immediately adjacent to the location of the reef (40) such as the sea floor or beach sand. See Col. 1, Ins. 5-30 emphasis on lines 21-25. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the method of shoreline

revetment of Dooleage, with the steps of inflating a plurality of erosion control bags with water and then a slurry, using immediately available fill material, such as sea floor or beach sand, as taught by Hepworth et al., in order to create new habitats, such as artificial reefs for sea animals. See Col. 3, Ins. 10-38.

In regards to claim 31 Dooleage discloses a system for forming a barrier or a dam in a water environment, the system comprising:

A 1st impermeable elongated tube (13) capable of receiving:

A plurality of ballast tubes (11, 12, 17, 19) therein.

Wherein the overall barrier or dam is essentially watertight on its exterior surface due to the impermeability of the geotextile material, of the tube (15). What Dooleage does not disclose is using the barrier as an artificial reef. However, Hepworth et al. teaches it is well known to form artificial reefs (40) from erosion control bags (10), which can be stacked in a pyramid-shaped barrier, and filled with a slurry of beach sand or the like, to dissipate wave action, thus providing an inviting habitat for sea life. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the barrier bags of Dooleage, with solid fill materials, as taught by Hepworth et al., in order to create new habitats, such as artificial reefs for sea animals. See Col. 3, Ins. 10-38.

In regards to claims 32-34 Dooleage discloses the geotextile container (13) is made impermeable by use of reinforced neoprene, rubber and vinyl plastic coatings.

In regards to claims 42, 37, which depends from claim 42 Dooleage discloses a tubular barrier apparatus (10), comprising:

An elongated fabric container (13) having two ends.

A plurality of independent, outer ballast tubes (11, 12) extending longitudinally within the container (13).

A plurality of straps, such as hoops, longitudinally spaced along the length of the elongated container, thereby forming reinforced regions along the length of the container. Said reinforced regions being supportive of the elongated container and providing a greater resistance to stress than the fabric of the container. What Dooleage does not disclose is using the barrier apparatus as an artificial reef. However, Hepworth et al. teaches erosion control bags (10) can be used in a variety of applications, such as erosion control of shorelines experiencing tidal action, as well as, erosion control of stream banks, artificial reefs and may be filled, insitu, over or under water. See Col. 1, Ins. 6-12. Further, Hepworth et al. teaches it is known to fill erosion control bags with water and/or solid fill, such as sand, gravel, cement etc. See Col. 1, Ins. 20-25. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the barrier bags of Dooleage, with solid fill materials, as taught by Hepworth et al., in order to form an artificial reef, by configuring the system to dissipate wave energy.

In regards to claim 45 Dooleage discloses a system for forming a water barrier or dam, the system comprising:

A 1st tubular container (13), said container being impermeable and intended for receiving;

At least 2 ballast tubes (11, 12, 19) disposed within the container (13). Wherein the barrier is effective for temporary flood protection and damming operations.

Although Dooleage discloses filling the ballast tubes with water; Dooleage does not disclose is using the system for shoreline protection from tidal action. See Cols. 2-3.

However, Hepworth et al. teaches erosion control bags (10) can be used in a variety of applications, such as erosion control of shorelines experiencing tidal action, as well as, erosion control of stream banks, flood control, artificial reefs and may be filled, insitu, over or under water. See Col. 1, Ins. 6-12. Further, Hepworth et al. teaches it is known to fill erosion control bags with water and/or solid fill, such as sand, gravel, cement etc., to increase the mass and load strength of the barrier thus formed. Said barrier (40) being formed of a plurality of semi-permeable geotextile material, in order to permit water to pass from the interior of an erosion control bag, to an exterior thereof, thus leaving a previously water-filled erosion control bag filled with solid fill material, such as local beach sand, gravel or delivered cement, etc. See Col. 1, Ins. 20-25. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the barrier bags of Dooleage, with solid fill materials, as taught by Hepworth et al., in order to expand the utility of the system, by configuring the system to dissipate wave energy.

In regards to claims 52-57 Dooleage discloses the use of straps "wrapped around the bags and spaced therealong", to secure a plurality of erosion control bags together. See Col. 2, Ins. 37-40.

In regards to claims 46-50:

The actual language of claims 46-50 appear to be in "product by process" form. Hence, only the structural requirements of the claims are given patentable weight, and not to the process by which the structural features are provided. Still further, it is unclear as to what the "impermeable liner" of claims 49, 50 actually encompasses, because the limitation is defined by its disposition relative to the "interior surface of the container; and not its actual structural features. Therefore, the "liner" is seen to be alternative language similar to the "coating" cited in claims 46-48.

To that affect, Dooleage discloses the use of an impermeable geotextile of vinyl plastic or reinforced neoprene or reinforced rubber. Further, Hepworth teaches porosity of the erosion control bags (10) can be adjusted by applying a coating of polyvinyl chloride, Teflon, acrylic compounds etc, and that "This permits more precise control over porosity, improves tear strength and provides encapsulation of the filaments or bundles of filaments". Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the elongate container (13) of Dooleage, with a coating layer, as taught by Hepworth, in order to increase the tear strength of the container. See Hepworth col. 2, Ins. 4-37.

However, in the alternative: Claims 49, 50 are further rejected as follows.

Claims 2, 3, 38-41, 40, 49, 50, 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage # 5,125,767 in view of Hepworth et al. # 3,957,098, as applied to claims 1, 42, 45 above, and further in view of Bradley # 5,902,070.

Dooleage in view of Hepworth et al., each teach the use of a bag assembly for forming dams and barrier to protect areas from water, such as flooding or tidal action.

Dooleage in view of Hepworth et al., further disclose such bag assemblies are formed by heat sealing or stitching seams together to form a desired size barrier or dam. What Dooleage in view of Hepworth et al., do not disclose is how the use of multi-layer bags formed by spiral seeming a geotextile fabric into a tubular shape.

However, Bradley teaches it is well known to form erosion/flood control bags (90) by:

Providing at least two sheets of a geotextile material (91, 93).

Helically seaming each sheet into a tubular shape with closed ends, such that an inner layer and an outer layer is formed.

The dual layer container (90) being suitably made from permeable or non-permeable geotextile material, based on the type of ballast material being used. The seams being formed by stitching a plurality of thicknesses of geotextile material together, thereby forming a spiral belt at least on the outside of the container and along the length of the container; as shown in Fig. 2 as well as having the seam on the inside of the container, as shown in Fig. 3. See also Col. 8, ln. 55-col.9, ln. 5.

Said belted seams increasing the resistance to elongation of the container from internal pressure. See Bradley Cols. 12-13. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the system of Dooleage in view of Hepworth et al., with reinforced seams, as taught by Bradley, in order to prevent internal pressure from bursting the bags.

In regards to Claims 38-41, which depend from Claim 42, Dooleage discloses an elongated fabric container (13) having 2 opposed ends.

A plurality of independent ballast tubes (11, 12) extending longitudinally within the container. The ballast tubes each having an inside and outside space, the ballast tubes being configured to receive fill material solids on their respective inside spaces. What Dooleage does not disclose is reinforcing the container with a plurality of reinforcement device. However, Bradley teaches a geotextile container having a plurality of spaced hoops, a spiral hoop formed by stitching several layers of geotextile sheet material together, to form a helically coiled tube, stitched about a spiral seam (54) on the outside of said container. See col. 6, line 57-col. 7, line 7. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the erosion control bags of Dooleage in view of Hepworth et al., with reinforced regions, as taught by Bradley, in order to prevent internal pressure from bursting the bags.

In regards to claims 49, 50 Dooleage in view of Hepworth et al. discloses a water barrier, for use in flood control, shoreline protection and the formation of artificial reefs. Although Dooleage Hepworth et al. disclose the use of geotextiles that are permeable or impermeable, dependent upon the users choice of fill material; Dooleage in view of Hepworth et al., do not disclose the use of a double layered erosion control bag. However, Bradley teaches it is known to form erosion control bags having at least 2 layers of geotextile material, an inner layer of which can be permeable or impermeable dependent upon the fill material, (water, sand or silt) that is intended to be used. Therefore, it would have been obvious to make the elongate container of Dooleage in view of Hepworth et al., with an inner, impermeable liner disposed adjacent the interior surface of the container as taught by Bradley, in order to utilize local beach sand. See Bradley Col. 10.

Claims 43, 37, which depend from claim 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage in view of Hepworth et al., as applied to claim 42 above, and further in view of Labora GB 1,487,986.

Dooleage in view of Hepworth et al., disclose all that is claimed, as put forth with respect to Claim 42 above, to include dissipating water from the interior of the erosion control bags, at the same rate a sand slurry is introduced into the erosion control bag, thus forming a sand filled bag, capable of forming an artificial reef; and further including

the use of longitudinally spaced straps along the length of the erosion control bag; but does not disclose a longitudinal belt secured to the outer surface of the elongated container. However, Labora teaches an elongated container (1) having a plurality of longitudinally spaced, reinforced regions (6, 7, 8), in the form of straps and being supportive of the elongated container and providing a greater resistance to stress than the fabric of the container; is advantageously secured to a pair of longitudinal belts (10, 11), thereby providing additional stability to the container (sand bag). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the barrier of Dooleage, with longitudinally spaced reinforced regions, as taught by Labora, in order to increase the load strength of the barrier. See Labora cols. 2, 3.

In regards to Claim 43, Labora teaches the use of longitudinal belts (4), which can be formed as an integral pad of the opposing walls of the container. Said reinforced regions and longitudinal belts can be plastic or metal, in the shape of strips, cords, plates etc., and can be arranged depending on the objects being sought. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the barrier of Dooleage, with a longitudinal belt, as taught by Labora, in order to increase the load strength of the barrier.

Claims 6, 8, 11, 13-15, 19-21, 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage # 5,125,767 in view of Hepworth et al. # 3,957,098 and Holmberg # 5,158,395.

Dooleage discloses a system for forming a barrier or dam, the system comprising:
A 1st tubular container (13) having an inside space, and closed ends, said container being intended for receiving:

At least 2 ballast tubes (11, 12, 19) disposed within the container (13). Wherein the barrier is effective for temporary flood protection and damming operations.

Although Dooleage discloses filling the ballast tubes with water; Dooleage does not disclose is using the system for shoreline protection from tidal action. See Cols. 2-3. However, Hepworth et al. teaches erosion control bags (10) can be used for dissipation of wave action as well as for flood control, based upon what type of ballast material is used to fill the bags. Hepworth et al., further teaches filling the bag with water and/or solid fill material. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to fill the ballast tubes of Dooleage, with solid fill materials, as taught by Hepworth et al., in order to expand the utility of the flood control bag. What Dooleage in view of Hepworth do not disclose is the use of cradle tubes. However, Holmberg teaches erosion control mats are advantageously provided with cradle tubes (26) filled with a solid fill material, that are positioned outside, and adjacent to each of a plurality of erosion control bags (24), such that a pyramid-shaped dam or

barrier is formed. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the dam assembly of Dooleage in view of Hepworth et al., with anchor tubes, as taught by Holmberg, in order to maintain the system in a stable position to form a barrier or dam to tidal action.

See Holmberg Figs. 1-3; Cols. 6-7.

In regards to claims 11, 13-15 Dooleage discloses positioning a filler tube (20) within a ballast tube (19), which together form an anchor means (19), that facilitates holding the larger bags in place, while said larger bags (11, 12) are filled. What Dooleage in view of Hepworth et al. do not disclose is the use of a scour apron having anchor tubes. However, Holmberg teaches erosion control barrier assemblies (10) are advantageously provided with scour aprons (20) having solid-filled anchor tubes (22) disposed below and supporting a plurality of stacked, erosion control bags (24), having anchor tubes (26) to prevent shoreline scour at the foot of the barrier formed by the erosion control bags (24). See Holmberg Col. 5, ln. 20-col. 6, ln. 36. Therefore, it would have been obvious to provide the shoreline protection barrier of Dooleage in view of Hepworth et al., with a scour apron having anchor tubes, as taught by Holmberg, in order to form a permanent barrier, such as a jetty or pier, as reasonably suggested by Holmberg and Hepworth et al.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage # 5,125,767 in view of Hepworth et al. # 3,957,098 and Bradley # 5,902,070. Dooleage discloses a system for forming a barrier or dam, the system comprising: A 1st tubular container (13) having an inside space, and closed ends, said container being intended for receiving; At least 2 ballast tubes (11, 12, 19) disposed within the container (13). Wherein the barrier is effective for temporary flood protection and damming operations. What Dooleage does not disclose is using the system for shoreline protection from wave and/or tidal action. See Cols. 2-3. However, Hepworth et al. teaches erosion control bags (10) can be used in a variety of applications, such as erosion control of shorelines experiencing tidal action, as well as, erosion control of stream banks, flood control, artificial reefs and may be filled, insitu, over or under water. See Col. 1, Ins. 6-12. Further, Hepworth et al. teaches it is known to inflate an erosion control bag with water, and then displace the water with a slurry of water and a solid fill, such as sand, gravel, cement etc. The porosity of the erosion control bag being controlled by selective use of a geotextile fabric coated with an appropriate coating, such as polyvinyl chloride. See Col. 1, Ins. 20-25; col. 2. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the barrier bags of Dooleage, as selectively permeable containers of woven geotextile and to inflate said bags with water, and then dissipate the inflation water with solid fill materials, as taught

by Hepworth et al., in order to create artificial reefs. What Dooleage in view of Hepworth et al. do not disclose is the use of a multi-layered outer, erosion control bag. However, Bradley teaches it is known to make erosion control bags from multiple layers of geotextile material, each of said multiple layers are selectively made permeable or non-permeable to water, as the application for the erosion control bag demands. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to make the artificial reef of Dooleage in view of Hepworth et al. with a combination of permeable and non-permeable geotextile materials, in order to accommodate the intended use of barrier. See Bradley col. 3, Ins. 16-25.

Claims 62-72, 76, 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage # 5,125,767 in view Bradley # 5,902,070.

Dooleage discloses a barrier in the form of an elongated container (13) having two ends and a plurality of ballast tubes within the elongated container (13). As well as a plurality of transverse reinforced regions along the length of the elongated container, the regions being configured to provide structural support to the container, by providing a plurality of straps/hoops around the erosion control bags. What Dooleage does not disclose is whether or not the reinforced neoprene or reinforced rubber erosion control bags comprise a woven fabric. However, Bradley teaches it is known to form erosion control

bags from "geotextile material that forms each of a first sheet 21, a second sheet 31, and any additional sheets in the construction, is woven from synthetic fibers such as nylon, polypropylene, polyester, polyethylene or any combination of the foregoing fibers. Each resulting sheet desirably is formed such that it can withstand forces appropriate to the application for which the resulting container is intended to be used. Thus, a rupture strength of 200 pounds will suffice for some applications, while other applications will require the sheet to withstand on the order of 1000 pounds without rupturing". Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to form the barrier of Dooleage, from geotextile materials, as taught by Bradley, in order to provide a barrier, commensurate with its application.

See Bradley Col. 6.

In regards to claims 64, 66-72 Dooleage discloses it is known and desirable to reinforce erosion control bags with straps or hoops to reinforce the bags at several locations along the length of the bags. What Dooleage does not disclose is connecting each of the anchor straps by a longitudinal seam extending along the length of the container.

However, Bradley teaches it is known to form erosion control bags with a plurality of fill ports (77) and with several layers of geotextile material, which can be stitched together along a linear or spiral, longitudinal seam, such that an inner sheet of the erosion control bag having a spiral, longitudinal seam, can be enclosed within an outer sheet of the erosion control bag having a linear, longitudinal seam, wherein the spiral seam of the inner sheet of the erosion control bag forms a plurality of transverse reinforced regions, that are connected by a longitudinal seam of the outer sheet of the erosion control bag, such that the anchor seam binds and reinforces the spiral seam of the inner sheet. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the barrier of Dooleage, with a multi-layered erosion bag, as taught by Bradley, in order to form a barrier of sufficient strength for its intended use, as clearly taught by Bradley. See Col. 6.

In regards to claims 76, 77 Dooleage discloses a cylindrical geotube water barrier (13) having an inner surface. Dooleage further discloses it is desirable to provide at least one ballast tube (11, 12, 17, 19) disposed within said barrier (13) and at least one strap defining a transversely reinforced region. What Dooleage does not disclose is forming the geotube (13) from multiple layers, of geotextile material. However, Bradley teaches it is known to form a geotube water barrier from at least 2 sheets of longitudinally seamed geotextile material, said seams defining a plurality of reinforcing anchor straps in order to resist mechanical damage to the geotube. See Figs. 1-3; Col. 6.

Claims 76, 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradley # 5,902,070 in view of Dooleage # 5,125,767.

Bradley discloses a cylindrical geotube water barrier having an inner surface formed by longitudinal seaming, comprising:

An elongated fabric container having two ends (B, D) and at least two seams (41, 42).

Bradley further discloses the geotube can be formed by joining together at one of said at least 2 seams, at least 2 cylindrical tubular sections to form a transversely oriented reinforced region along the length of the geotube. See Figs. 1, 5. The transverse reinforced region being in the form of anchoring straps, that are configured to provide structural support to the geotube container with a high resistance to mechanical damage. What Bradley et al. does not disclose is the use of ballast tubes inside said geotube. However, Dooleage teaches it is known to dispose at least one ballast tube (11, 12, 19, 20) within a geotube (11, 12, 13, 15') in order to form a pyramid shaped water barrier, from a plurality of geotubes. Dooleage further discloses the geotubes can be bundled together using a net or anchoring straps. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the water barrier of Bradley with at least one ballast tube, as taught by Dooleage, in order to form a water barrier of a desired height. See Dooleage, Col. 2, Ins. 30-40.

(10) Response to Argument

Appellant argues " Applicant is in his late-60's now, and has been in this business for many years. He has often been reminded that Applicant's business is very much a struggle against the unpredictability and power of Mother Nature, which constantly acts to reclaim the land that Applicant's barriers and methods try to preserve... The size and scope of these types of structures that are called upon to resist these powerful forces of wind and wave action are massive. The drawings in some of the references attempt to convey the relative sizes of these kinds of structures. But even these drawings are incapable of providing the impact of actually seeing these structures being built and put into place as Applicant has done for many years..."

In an attempt to provide the Office with an appreciation of the experience of an encounter with some of these structures, Applicant provided in his Amendment After Final Rejection, a copy (attached at the end of this brief before the Appendix of Claims) of one of his company's brochures (published in December, 1997) containing photos that give some idea about the size of the outermost envelope of these structures in relation to a man standing inside one of the containers (lower right corner)".

However, Appellant's comments are not relevant to the actual claim language on appeal. Nowhere in the claims is the invention required to have a certain size.

Hence, Appellant 's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patently distinguishes them from the references.

Appellant then argues "The final rejections are characterized by the selective application of various structural features in order to make up the full complement of elements required by the claims...This is improper, and the rejections should be reversed".

However, the Examiner does not concur.

Appellant is reminded a significant number of the claims are rejected by Applicant's older patent US 5,902,070, which qualifies as prior art based on an earlier patent date, than the date of this Applications filing or its priority date.

Further, the changes made in the instant application appear to be obvious improvements of Appellant 's patented barrier system, wherein each improvement is clearly taught by the prior art, such as ballast tubes disposed within an outer tube, scour aprons with anchor tubes, cradle tubes etc.

Therefore, the argument is not persuasive.

Appellant then argues "The motivation supplied by the Final Action for selecting particular elements from a reference versus selecting other potential elements in a reference, ignores the fact that the magnitudes of the forces involved in these types of structures and the disastrous, if not catastrophic, results upon their failure once they are put into place for their intended uses, tends to make persons of ordinary skill far more hesitant to extract particular structural elements from one environment or type of structure and apply them to another, than is reflected in the final rejections".

However, the Examiner does not concur.

Appellant is reminded nothing in the claims reference or suggests the type or magnitude of the forces, Appellant has put forth above. The actual claim language refers to barriers, system for maintaining fill solids to form a barrier; but nothing in the actual claim language suggests the disastrous, if not catastrophic magnitudes of forces caused by wind and wave action, as argued.

Rather, since neither a specific size range nor specific load-strength range of the barrier is found in the actual claim language, the claimed invention does not appear to be anything more than a sand bag having at least one sand bag disposed therein.

Therefore, the argument is not persuasive.

Appellant then argues "Every Rejection is Flawed for its Inaccurate Portrayal of Dooleage".

Applicant supports the argument by suggesting "Nowhere in Dooleage is it suggested that the ballast tubes should contain fill solids or any other material...rather than water".

However, Appellant is reminded claims 45-50, 52-72, 76, 77 do not require anything to be disposed in any of the geotubes forming the barrier or dam.

With respect to all other appealed claims Appellant is reminded; in response to Appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA

1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In this case all claims were rejected under 35 U.S.C. 103(a), wherein at least a secondary reference clearly teaches the use of "water and/or a filler is pumped into the bag...The filler may be sand, gravel cement, etc.". See Hepworth et al. Col. 1.

Therefore, the argument is not persuasive.

Appellant's argument with respect to "Holmberg in view of Dooleage" is moot since the rejection was withdrawn.

Appellant then argues "The Dooleage disclosure was first made public in June, 1992...The rejection does not rely on any teaching that became public after the Dooleage issue date...Thus, if the base contention of the rejection is true, then the invention of the rejection is true, then the invention of claims 22-24 was obvious as of June 1992 issue date of Dooleage".

To that the Examiner concurs, Claims 22-24 are obvious and thus unpatentable over Dooleage in view of Hepworth et al.

Further, In response to applicant's argument based upon the age of the references, contentions that the reference patents are old are not impressive absent a showing that the art tried and failed to solve the same problem notwithstanding its presumed knowledge of the references. See *In re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977). Therefore, the argument is not persuasive.

Appellant then argues "Moreover, claim 26 adds to the requirements of claim 25, the further requirement of a 1st cradle tube positioned adjacent to the container...While Holmberg discloses the use of a control pocket 26 adjacent a tubular shaped stabilizer (24) wherein both the tubular shaped stabilizer 24 and the control pocket 26 are disposed atop an underlying mat 20 formed of water permeable geotextile material, such a disclosure fails to suggest to the skilled artisan to use a cradle tube adjacent a tubular shaped container that is not already disposed atop an underlying mat structure that is anchored by anchoring pockets (22)".

However, it is unclear as to what patentable distinction Appellant is attempting to make.

Claim 26 explicitly recites "a first cradle tube positioned adjacent the container". To which Holmberg clearly illustrates and teaches the use of multiple "cradle tubes (26)" that form a cradle, in which a tubular water barrier is received. Hence, the prior art teaches the claimed limitation. Therefore, the argument is not persuasive.

Appellant then argues "Nor is there (is) any motivation to combine the control pocket 26 of Holmberg with the container of ballast tubes shown in Dooleage...Only the hindsight provided by (Applicant's) disclosure teaches the use of the cradle tube adjacent the tubular shaped container without the underlying mat structure that is anchored by anchoring pockets 22".

However, the Examiner does not concur.

Appellant is reminded Claims 27 and 28 require a "scour apron comprising an anchor tube".

The fact that Holmberg teaches the use of cradle tubes (26) **disposed adjacent a tubular container (24)** and a **scour apron (20) having at least 2 anchor tubes**, for preventing soil from washing out below the containers (24), a condition known in the art as "scour", which can cause the containers to move and shift as soil below the barrier is washed away; is in fact a *prima facie* (self evident) case of obviousness and clear motivation to improve the stability of shoreline protection systems i.e. erosion control bags, sand bags, by covering the soil most susceptible to wave induced scour.

See Holmberg col. 5, ln. 20-col. 6, ln. 51.

Applicant's arguments directed to Dooleage in view of Paoluccio and Cizek et al. are moot in view of the new grounds of rejection.

Applicant argues against the rejection of Dooleage in view of Bradley by stating "Claim 35 requires a 1st elongated tube formed of partially permeable geotextile material and having a substantially waterproof inner liner and containing ballast tubes that are generally semi-permeable and at least one...holds solid fill material therewithin...Dooleage does not teach ballast tubes that are semi-permeable and so Dooleage has no need for Bradley to again suggest that the outer container be permeable or semi-permeable". However, the Examiner does not concur.

Dooleage discloses it is well known to dispose at least one erosion control bag inside another, to form a barrier to water, such as a temporary dam. Although Dooleage does not disclose disposing sand in a sand bag, such appears to be obvious and not needing any level of innovation, but appears to be well within the skill of one in the art. To that affect, Hepworth et al. teaches it is known to form sand bags from water permeable geotextile materials, and to control porosity with a coating, such a polyvinyl chloride, such that once the sand bags are inflated with water, the water can be dissipated through the permeable geotextile sand bag, at the same rate at which a slurry of water and sand is forced, under pressure into the sand bag. Although neither Dooleage nor Hepworth et al., teach the use of multi-layered sand bag, Bradley (**Appellant's patented geotextile container**), clearly teaches it is known to form sand bags from a plurality of layers of geotextile material and that each layer is selectively chosen to be a permeable or non-permeable geotextile, based on the intended use of the container. Hence, when used to form artificial reefs, that provide surfaces for plant life to grow on, it would be obvious to one of ordinary skill to form the sand bag assembly of Dooleage in view of Hepworth et al., with a multi-layered outer container bag, in order to prevent deterioration of the outer container bag.

Therefore, the arguments are not persuasive.

Appellant then argues against the combination of Dooleage in view of Labora by stating "Dooleage teaches a cover (13) that contains ballast tubes in the form of liquid-filled bags...Labora teaches a flexible envelope 1 filled with a solid material 2 such as sand and cement...Labora structure as shown in the drawings includes internal reinforcing member (4) that are fixed internally...Labora fails to suggest or disclose using a plurality of independent ballast tubes inside an elongated fabric container...Only by hindsight provided by Appellants disclosure can the skilled artisan derive from Labora the idea of supplying solid fill material to the ballast tubes of Dooleage".

However, the Examiner does not concur.

Hepworth et al. clearly teaches the desirability of displacing inflation water from a tubular formed geotextile, with a sand slurry, thus forming a solids filled sand bag. Further Labora was cited in the rejection to show the obviousness in reinforcing the sand bag assembly with a pair of longitudinal belts (10, 11) disposed longitudinally along the length of a sand bag, said belts being secured to a plurality of straps or hoops (6, 7, 8), thereby increasing the stability of the barrier formed from sand bags.

Therefore, the argument is not persuasive.

In summary, all of Appellant's arguments are based on Appellant's belief that none of the prior art teaches placing sand in a sand bag, and that only the Appellant has contemplated and thus realized a patentable distinction in the use of a solid filled sand bag.

However, Applicant is reminded not all the independent claims require a solid filled sand bag. As cited above by the Examiner and in light of the reference to Hepworth et al., it is known to inflate a semi-water permeable sand bag with water, and then displace the water from inside the sand bag by introducing a sand based slurry into the sand bag, thus forming a sand filled sand bag, that can be used for a wide variety of uses, such as artificial reefs, shoreline revetment, as well as flood control.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid **sua sponte dismissal of the appeal** as to the claims subject to the new ground of rejection:

- (1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.
- (2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,



Raymond Addie,
Patent Examiner
Group 3600

2/2/06

A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:

Conferees:

TW 
HS 



APPROVED BY
DONALD T. HAJEC
DIRECTOR, TECHNOLOGY CENTER